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Tamotsu Sakuraba

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EXAMINER

MCLEAN, NEIL R

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/802,858	<b>Applicant(s)</b> SAKURABA ET AL.	
	<b>Examiner</b> Neil R. McLean	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15, 20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 20 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 1-22 are pending in this application.

### ***Response to Arguments***

2. Applicant's arguments, see page of Applicant's Remarks filed 1/25/2010, with respect to the rejection(s) of claim(s) 1-15, 20 and 22, under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

3. Regarding Applicant's Argument:

"Applicants continue to assert that Teraura does not teach or suggest "a printing unit for printing the specified mark on a recording element including an IC tag when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job" in combination with "a writing unit for writing mark information indicating the specified mark's content on the IC tag included in the recording element when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job," as recited in claim 1."

Examiner's Response:

Torigoe does not disclose expressly a printing unit for printing the specified mark on a recording element including an IC tag when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job” and “a writing unit for writing mark information indicating the specified mark’s content on the IC tag included in the recording element when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job.

Zaba discloses a printing unit (Figure 4) for printing the specified mark on a recording element including an IC tag (Figure 3 shows the circuitry of the memory tag of Figure 2) when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job” and “a writing unit for writing mark information indicating the specified mark’s content on the IC tag included in the recording element when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job (Figure 2 and a read/write device for wireless communication with the memory tag)

Zaba & Torigoe are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of reading and writing and judging the content of ‘embedded’ marks in a paper document. Both references also disclose methods of inhibiting printing and/or inhibiting users from accessing a document if that document is not intended for them. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate Zaba’s printer which reads and writes RFID data to the RFID tag on a sheet of printing paper in addition to Torigoe’s method of detecting embedded data such as watermarks. The suggestion/motivation for doing so is to provide a secure means of

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printing a document and to prevent unauthorized access to that document. It would have been obvious to combine Zaba with Torigoe to obtain the invention as specified in order to protect, prevent or deter unauthorized copying of digital media.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

5. Claims 1-15, 20, and 22 are rejected under 35 U.S.C. 103(a) as being anticipated by Torigoe (US 2002/0018228) in view of Zaba et al. (US 7,309,017) hereinafter 'Zaba'.

Regarding Claim 1:

Torigoe discloses an image forming device (e.g., FIG. 1 is a block diagram of an image processing system), comprising:

a receiving unit for receiving a printing job (e.g., CPU contained in Host 101 );

a judging unit for judging whether an instruction for adding a specified mark to be printed in addition to image data is included in the printing job received by said receiving unit or not (e.g., CPU 102 executes a program stored in the memory 103 to realize detection, judgment, color processing, quantization processing, and the like of a digital watermark or another mark for specifying a printing inhibition image as described in [0040]);

Torigoe does not disclose expressly a printing unit for printing the specified mark on a recording element including an IC tag when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job” and “a writing unit for writing mark information indicating the specified mark’s content on the IC tag included in the recording element when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job.

Zaba discloses a printing unit (Figure 4) for printing the specified mark on a recording element including an IC tag when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job (FIGS. 4 and 5, apparatus 110 for printing onto a base medium and data writing to a memory tag in or on the base medium is illustrated. This embodiment is for use with a base medium in the form of sheet paper 112, to which memory tags 108 have been applied or within which memory tags 108 have been embedded (as shown in FIG. 4).) and a writing unit (read/write device 120) for writing mark information indicating the specified mark’s content on the IC tag included in the recording element when it is judged by said judgment unit that the instruction for adding the specified mark is included in the printing job (Apparatus 110 also includes a memory tag read/write device 120 which operates in known manner to write data to and/or read data from memory tags as required using an inductive coil 121; Column 5, lines 57-60); (The main processor 122 receives instruction signals from a host computer 124, including the what to print; where to print it; where the memory tag 108 is or tags 108 are in/on the paper sheet 112; and what data to write to the memory tag(s) 108; Column 6, lines 8-15).

Zaba & Torigoe are combinable because they are from the same field of endeavor of image processing; e.g., both references disclose methods of reading and writing and judging the content of ‘embedded’ marks in a paper document. Both

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references also disclose methods of inhibiting printing and/or inhibiting users from accessing a document if that document is not intended for them. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to incorporate Zaba's printer which reads and writes RFID data to the RFID tag on a sheet of printing paper in addition to Torigoe's method of detecting embedded data. The suggestion/motivation for doing so is to provide a secure means of printing a document and to prevent unauthorized access to that document. It would have been obvious to combine Zaba with Torigoe to obtain the invention as specified in order to protect, prevent or deter unauthorized copying of digital media.

Regarding Claim 2:

Zaba further discloses the image forming device as claimed in claim 1, wherein said writing unit writes on the IC tag included in the recording element IC tag information including the IC tag's managing number and the mark information indicating the specified mark's content (e.g. Memory Tag with Unique ID; Column 9, lines 8-34);

said image forming device further comprising an IC tag information transmitting unit for transmitting the IC tag information written on said IC tag by said writing unit to an external device that is capable of communicating with said image forming device (Memory Tag with Unique ID, on-spot Hashing, and Asymmetric Cryptographic Capability where the memory tag has responsibility for control of data it stores, and can receive and transmit data with confidentiality and integrity as described at Column 10, lines 29-39)

Regarding Claim 3:

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Zaba further discloses the image forming device as claimed in claim 2, wherein said IC tag's managing number is assigned by said external device and received from said external device (The main processor 122 receives instruction signals from a host computer 124, including the details of: what to print; where to print it; where the memory tag 108 is or tags 108 are in/on the paper sheet 112; and what data to write to the memory tag(s) 108. The main processor 122 sends command signals as required to: the mechanics controller; the print head 116; and the memory tag read/write device 120, to implement the instruction signals; Column 6, lines 8-22)

Regarding Claim 4:

Zaba further discloses the image forming device as claimed in claim 2, wherein said IC tag information further includes information for specifying the image forming device used for writing the IC tag information (The main processor 122 receives instruction signals from a host computer 124, including the details of: what to print; where to print it; where the memory tag 108 is or tags 108 are in/on the paper sheet 112; and what data to write to the memory tag(s) 108. The main processor 122 sends command signals as required to: the mechanics controller; the print head 116; and the memory tag read/write device 120, to implement the instruction signals; Column 6, lines 8-22).

Regarding Claim 5:

Zaba further discloses the image forming device as claimed in claim 3, wherein said IC tag information further includes information for specifying the image forming device used for writing the IC tag information (The main processor 122 receives instruction signals from a host computer 124, including the details of: what to print; where to print it; where the memory tag 108 is or tags 108 are in/on the paper sheet 112; and what data to write to the memory tag(s) 108. The main processor 122 sends command signals as required to: the mechanics controller; the print head 116; and the memory tag read/write device 120, to implement the instruction signals; Column 6, lines 8-22).



Regarding Claim 6:

Torigoe further discloses the image forming device as claimed in claim 1, wherein said specified mark is a mark indicating that it is prohibited to copy a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described by Torigoe in [0010].)

Regarding Claim 7:

Torigoe further discloses the image forming device as claimed in claim 2, wherein said specified mark is a mark indicating that it is prohibited to copy a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

Regarding Claim 8:

Torigoe further discloses the image forming device as claimed in claim 3, wherein

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said specified mark is a mark indicating that it is prohibited to copy a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

#### Regarding Claim 9:

Torigoe further discloses the image forming device as claimed in claim 4,  
wherein

said specified mark is a mark indicating that it is prohibited to copy a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

#### Regarding Claim 10:

Torigoe further discloses the image forming device as claimed in claim 5,  
wherein

said specified mark is a mark indicating that it is prohibited to copy a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is

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multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

#### Regarding Claim 11:

Torigoe further discloses the image forming device as claimed in claim 1, wherein said specified mark is a mark indicating that it is prohibited to take out a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

#### Regarding Claim 12:

Torigoe further discloses the image forming device as claimed in claim 2, wherein

said specified mark is a mark indicating that it is prohibited to take out a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

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Regarding Claim 13:

Torigoe further discloses the image forming device as claimed in claim 3,  
wherein

said specified mark is a mark indicating that it is prohibited to take out a printed  
matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp,  
securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is  
multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output  
apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a  
processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is  
performed as described in [0010].)

Regarding Claim 14:

Torigoe further discloses the image forming device as claimed in claim 4,  
wherein

said specified mark is a mark indicating that it is prohibited to take out a printed matter (It  
is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities,  
and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is  
multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output  
apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a  
processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is  
performed as described in [0010].)

Regarding 15:

Torigoe further discloses the image forming device as claimed in claim 5,  
wherein

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said specified mark is a mark indicating that it is prohibited to take out a printed matter (It is assumed that the watermark is used for a purpose preventing illicit counterfeit of paper money, stamp, securities, and the like, besides the purpose of protecting a copyright. For example, a special mark or a watermark is multiplexed beforehand in the paper money, stamp, securities, and the like, this mark is detected by an image output apparatus, information is regarded as image information of the paper money, stamp, securities, and the like, and a processing for discontinuing printing, issuing a warning, or intentionally coating the entire surface with black is performed as described in [0010].)

Regarding Claim 20:

Claim 20, a method claim is rejected in the same manner as device claim 1.

Regarding Claim 22:

Claim 22, a Computer Executable Program Process method claim is rejected in the same manner as device claim 1.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tomomatsu (US 7,058,214) discloses an image processing apparatus comprising, in order to judge an image prohibited by law from being printed at high speed, a judgment unit for judging for each predetermined area whether or not an output requested image includes information indicating that the image is a judgment object image; and a determination unit for determining the predetermined area for each predetermined distance with respect to the output requested image.

***Examiner Notes***

7. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

Any communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is (571)270-1679. The examiner can normally be reached on Monday through Friday 7:30AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571.272.7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Neil R. McLean/  
Examiner, Art Unit 2625

/David K Moore/  
Supervisory Patent Examiner, Art Unit 2625